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EXAMINER	
PATEL, KAUSHIKKUMAR M	
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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KAREN L. NOEL, WENDELL B. FISHER JR.,
GREGORY H. JORDAN, and CHRISTIAN MOSER

Appeal 2008-004826
Application 10/619,697
Technology Center 2100

Decided:[1] July 2, 2009

Before JOSEPH L. DIXON, JAY P. LUCAS, and STEPHEN C. SIU, *Administrative Patent Judges*.

SIU, *Administrative Patent Judge*.

DECISION ON APPEAL

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[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

STATEMENT OF THE CASE

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–19. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Invention

The invention relates to a method and system of writing data in a multiple processor computer system (Spec. ¶ [0003]).

Independent claim 1 is illustrative:

> 1. A method comprising:
>
> executing a first instance of a program on a first processor in a computer system having multiple processors, and wherein the program refers to a virtual memory address (VMA) in a page table to obtain a pointer to a memory location to write writable data;
>
> executing a second instance of the program on a second processor in the computer system, and wherein the second instance of the program refers to a virtual memory address (VMA) in a page table to obtain a pointer to a memory location to write the writable data; and
>
> wherein the VMA referred to by each of the first and second instance of the program is the same, and wherein the VMA referred to by the first instance of the program points to a memory coupled to the first processor, and wherein the VMA referred to by the second instance of the program points to a memory coupled to the second processor.

References

The Examiner relies upon the following references as evidence in support of the rejections:

Harvey	US 6,233,668 B1	May 15, 2001
de Backer	US 6,266,745 B1	Jul. 24, 2001

Rejection

1. The Examiner rejects claims 1, 2, and 8-19 under 35 U.S.C. § 103(a) as being unpatentable over Harvey.
2. The Examiner rejects claims 3-7 under 35 U.S.C. § 103(a) as being unpatentable over Harvey and de Backer.

ISSUE

Appellants argue that "Harvey discusses the duplication of 'shared code and read-only data,' and that Harvey does not appear to address, or be operational with, duplication of writable data" (App. Br. 11).

Did Appellants demonstrate that the Examiner erred in finding that Harvey teaches or suggests the duplication of writable data on separate memories, each coupled to separate processors?

FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

1. Harvey teaches that "[o]ne way to retain multiprocessor-system advantages but reduce the cost that such non-uniform access times can

exact is to replicate a process's code and data in the different locales in which the process may be executed . . . [but that] replicating all such code and data is clearly impractical . . . [because] such a general policy would in most systems impose an intolerable synchronization overhead for read/write data" (col. 3, ll. 37–44).

2. Harvey teaches that "operating system's code and read-only data are attractive candidates for replication, for instance, since the resultant execution-speed advantage benefits essentially all processes" (col. 3, ll. 48–51).

3. Harvey teaches an allocation policy where "much or all of the operating system, i.e., shared code and read-only data, is replicated" (col. 8, l. 67 to col. 9, l. 1).

PRINCIPLES OF LAW

Obviousness

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

"The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416 (2007).

ANALYSIS

Based on Appellants' arguments in the Appeal Brief, we will decide the appeal on the basis of claim 1 alone. *See* 37 C.F.R. § 41.37(c)(1)(vii).[2]

Harvey demonstrates that one of ordinary skill in the art would have known that a first processor accessing memory coupled to a second processor could take a performance hit (FF 1). Harvey addresses this problem through the replication of portions of memory. In particular, Harvey identifies code and read-only data as candidates for replication (FF 2, 3). But Harvey does not limit its teachings to code and read-only data.

According to Harvey, "replicating all [of a process's] code and data is clearly impractical . . . [because] such a general policy would in most systems impose an intolerable synchronization overhead for read/write data" (FF 1). While Harvey highlights that it would be impractical to duplicate writable data in most systems, Harvey does not preclude duplication of writable data and specifically contemplates such duplication. Therefore, Harvey teaches or fairly suggests the duplication of writable data on separate memories, each coupled to separate processors, in discordance with the foundation of Appellants' argument that "Harvey does not appear to address, or be operational with, duplication of writable data" (App. Br. 11).

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[2] Appellants argue claims 3-7 under a separate heading from claims 1, 2, and 8-19 but do not provide additional arguments in support of claims 3-7.

For at least these reasons, we conclude that Appellants have not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's rejection of claim 1, and of claims 2-19 which fall therewith.

CONCLUSIONS OF LAW

Based on the findings of facts and analysis above, we conclude that Appellants have failed to demonstrate that the Examiner erred in finding that Harvey teaches or suggests the duplication of writable data on separate memories, each coupled to separate processors.

DECISION

We affirm the Examiner's decision rejecting claims 1–19.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

msc

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